

CLAIMS

1. A filter assembly for a cigarette, comprising:
a cylindrical filter element,

5 said filter element including
 a filter material,
 wrapping paper wound around the filter material,
and

 an adhesive region provided between the wrapping
10 paper and the filter material and bonding the wrapping
 paper and the filter material to each other, the
 adhesive region having a part applied with adhesive
 and continuously extending in a circumferential
 direction of the filter material.

15 2. The filter assembly according to claim 1, wherein
 the adhesive region has a plurality of adhesive-applied
 parts arranged at intervals in an axial direction of the
 filter element.

20 3. The filter assembly according to claim 2, wherein
 the adhesive-applied parts constitute a continuous loop
 pattern having loops arranged in a longitudinal direction
 of the wrapping paper, as viewed in development of the
 wrapping paper.

25 4. The filter assembly according to claim 2, wherein
 the adhesive-applied parts constitute a meandering pattern
 extending in a longitudinal direction of the wrapping paper,
 as viewed in development of the wrapping paper.

30 5. The filter assembly according to claim 2, wherein
 the adhesive-applied parts constitute a bar pattern having
 bars arranged at intervals in a longitudinal direction of
 the wrapping paper, as viewed in development of the
 wrapping paper.

6. The filter assembly according to claim 2, wherein

the filter material comprises a bundle of fibers.

7. The filter assembly according to claim 6, wherein the filter element further includes particles of adsorbent distributed through the filter material.

5 8. The filter assembly according to claim 7, wherein the adhesive-applied parts constitute a bar pattern having bars arranged at intervals in a longitudinal direction of the wrapping paper, as viewed in development of the wrapping paper, and

10 one of the bars is located at one end of the filter material.

9. The filter assembly according to claim 1, wherein the adhesive-applied part extends over an entire outer peripheral surface of the filter material.

15 10. The filter assembly according to claim 1, wherein the filter element is a plain filter element whose filter material is made of a fiber bundle only,

the filter assembly further comprises a cylindrical charcoal filter element arranged adjacent to the plain
20 filter element,

the charcoal filter element including
a filter material made of a bundle of fibers,
particles of adsorbent distributed through the
filter material,

25 wrapping paper wound around the filter material,
an inner adhesive region provided between the
filter material and the wrapping paper and bonding the
wrapping paper and the filter material to each other,
the inner adhesive region having a part applied with
30 adhesive and continuously extending in a
circumferential direction of the filter material,

forming paper wound around the plain and charcoal
filter elements to connect the filter elements to each

other, and

an outer adhesive region provided between the forming paper and the filter elements and bonding the forming paper to the filter elements, the outer
5 adhesive region having a part applied with adhesive and continuously extending in a circumferential direction of the filter elements.

11. A method of producing filter assemblies for cigarettes, comprising the steps of:

10 supplying a rod-like filter member and a paper web to a wrapping section;

continuously wrapping the filter member in the paper web when the filter member and the paper web pass through the wrapping section, to form a filter rod; and

15 cutting the filter rod into filter plugs of predetermined length,

wherein the paper web supply step includes a process of forming an adhesive region for bonding the paper web and the filter member to each other, the process including
20 applying adhesive to a part of the paper web before the paper web reaches the wrapping section, the adhesive-applied part being continuous in a width direction of the paper web.

12. The method according to claim 11, wherein the
25 adhesive-applied part is formed at intervals in a longitudinal direction of the paper web.

13. The method according to claim 12, wherein the adhesive-applied part constitutes a continuous loop pattern having loops arranged in the longitudinal direction of the
30 paper web.

14. The method according to claim 12, wherein the adhesive-applied part constitutes a meandering pattern extending in the longitudinal direction of the paper web.

15. The method according to claim 12, wherein the adhesive-applied part constitutes a bar pattern having bars arranged at intervals in the longitudinal direction of the paper web.

5 16. The method according to claim 12, wherein the filter member comprises a bundle of fibers.

17. The method according to claim 16, wherein the filter member supply step further includes a process of distributing particles of adsorbent into the fiber bundle
10 before the fiber bundle reaches the wrapping section.

18. The method according to claim 17, wherein the adhesive-applied part constitutes a bar pattern having bars arranged at intervals in the longitudinal direction of the paper web, and

15 one of the bars is located at one end of the filter member.

19. The method according to claim 11, wherein the adhesive-applied part extends over an entire area of the paper web except for a lap glue-applied line for bonding
20 both side edges of the paper web to each other.

20. The method according to claim 11, wherein the filter member comprises a rod member having plain and charcoal filter plugs alternately arranged in series and wrapped together in forming paper,

25 each of the plain filter plugs has a filter material and wrapping paper wound around the filter material, and

each of the charcoal filter plugs has a filter material, particles of activated charcoal distributed through the filter material and wrapping paper wound around
30 the filter material.